

Resistant Weeds & Management

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Winter burndown

- Burndown product
 - Glyphosate, Gramoxone, Liberty?
- Several residual options
 - Leadoff, Valor, Boundary, Sharpen, Fierce, Envive, Canopy, Authority, Sonic, Surveil
- Growth Regulator

Winter burndown

- Make application February - early April
- Apply to actively growing weeds
- Timing to horseweed is critical
 Spray before 8" tall

Burndown Trial Near Elizabeth City, NC

Roundup (22 fl oz) + 2,4-D (2 pt) in each mix
Sprayed December 9 , January 27, or March 17

Pictures taken May 12

Non-treated



Roundup + 2,4-D



December 9

January 27

March 17

Leadoff



December 9

January 27

March 17

Tricor



December 9



January 27



March 17

Boundary



December 9

January 27

March 17

Trivence



December 9

January 27

March 17

Valor



December 9



January 27



March 17

Envive



December 9

January 27

March 17

Sonic



December 9

January 27

March 17

Surveil



December 9

January 27

March 17

Fierce XLT



December 9

January 27

March 17

Zidua PRO



December 9

January 27

March 17

Conclusions

- Premixtures provide excellent control of most species.
- Control is possible with December applied herbicides
- Need to consider early burndown in most areas

Controlling PPO-resistant Palmer amaranth using preemergence herbicides

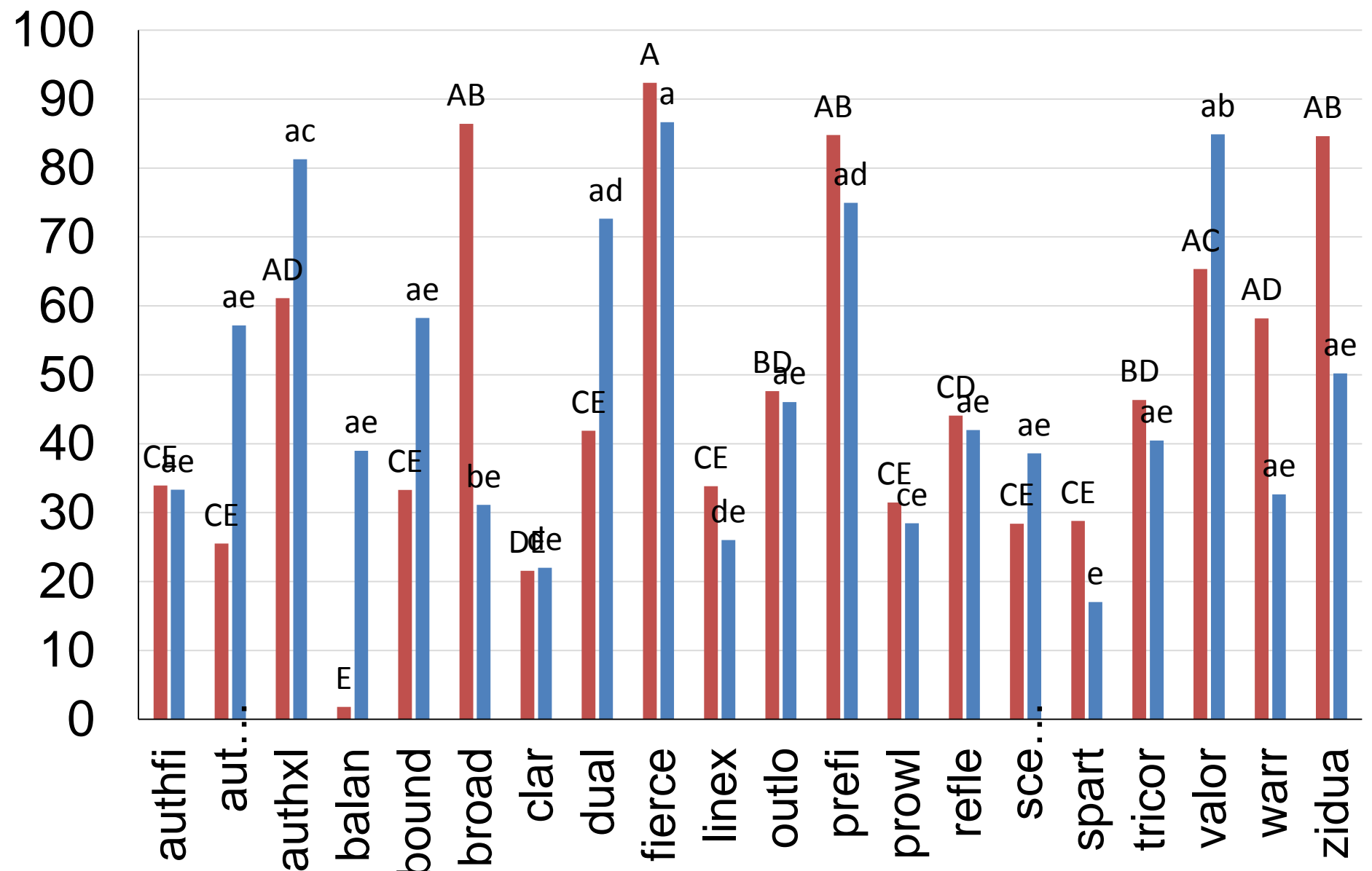


Trade Name	Active Ingredients	Application Rate
Authority First*	sulfentrazone + chloransulam-	6 oz./A
Authority MTZ*	methyl	8 oz./A
Authority XL*	sulfentrazone + metribuzin	5 oz./A
Broadaxe*	sulfentrazone + chlorimuron	20 fl oz./A
Spartan	sulfentrazone + S-metolachlor	5 fl oz./A
	sulfentrazone	
Balance Pro	isoxaflutole	16 fl oz./A
Dual Magnum	S-metolachlor	16 fl oz./A
Tricor 75DF	metribuzin	8 oz./A
Boundary*	S-metolachlor + metribuzin	20 fl oz./A
Clarity	dicamba	16 fl oz./A
Valor SX	flumioxazin	2 oz./A
Zidua	pyroxasulfone	2 oz./A
Fierce*	flumioxazin + pyroxasulfone	3 oz./A
Linex	linuron	16 fl oz./A
Outlook	dimethenamid-P	16 fl oz./A
Reflex	fomesafen	16 fl oz./A
Prefix*	fomesafen + S-metolachlor	32 fl oz./A
Prowl H2O	pendimethalin	24 fl oz./A
Scepter	imazaquin	2.8 oz./A
Warrant	acetochlor	48 fl oz./A

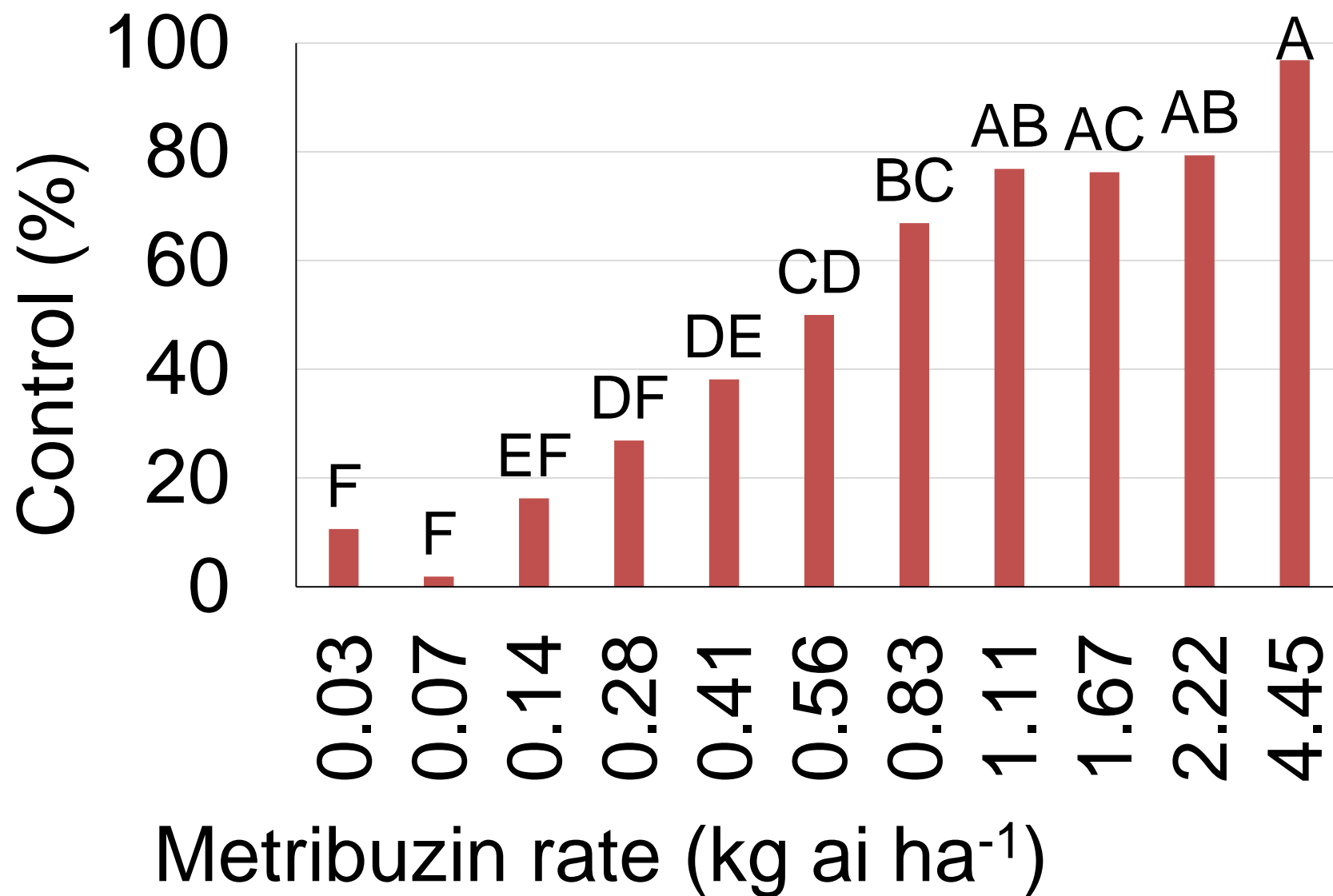
Results



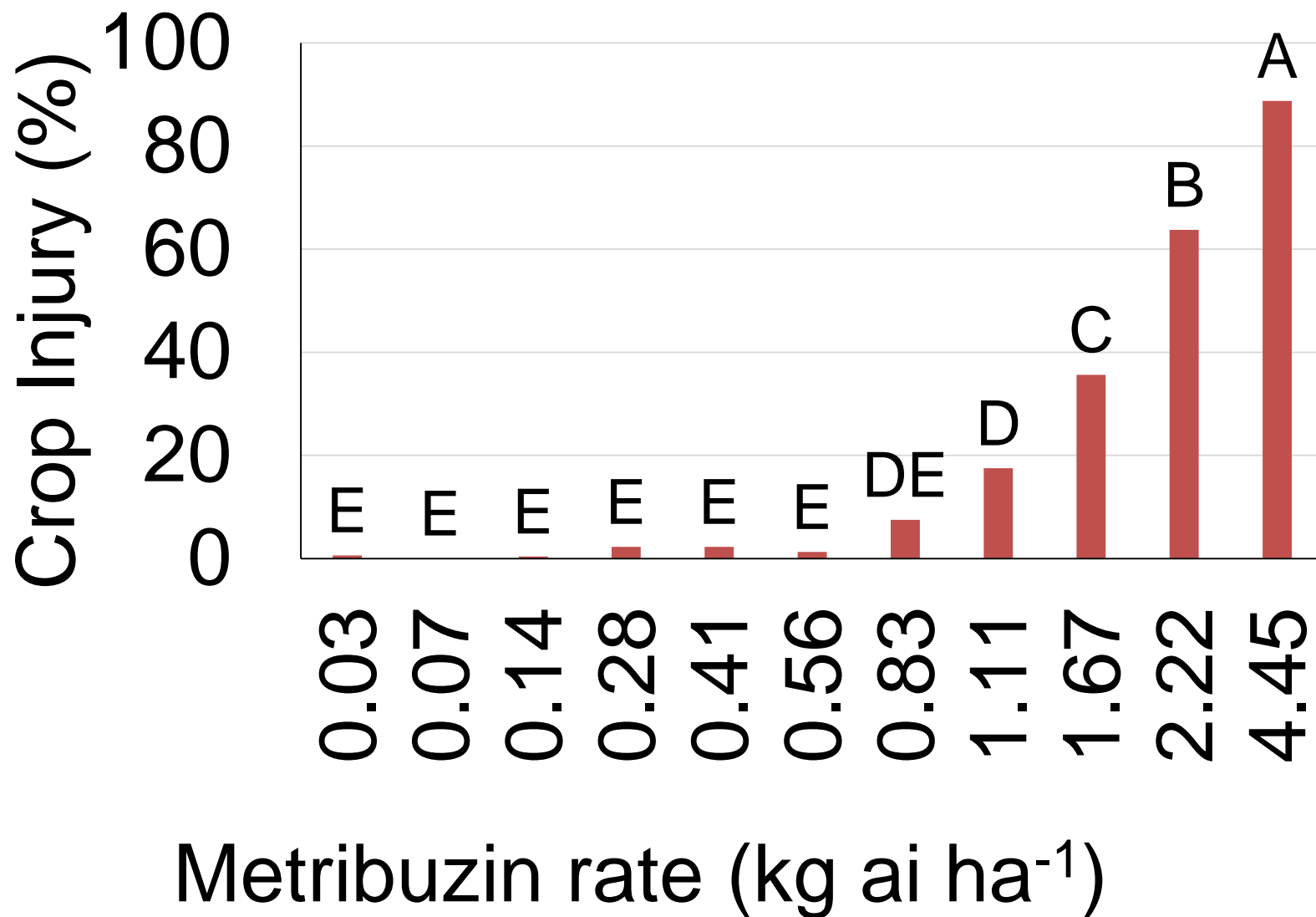
PPO Resistant Palmer amaranth Control with PRE Herbicides 4 WAT



5 WAT



5 WAT



Evaluation of Management Options for Glyphosate, ALS-, and PPO-resistant common ragweed



Wesley J. Everman

3 WAT

Moyock, NC



Rocky Mount, NC



Mississippi



Fomesafen
Fomesafen

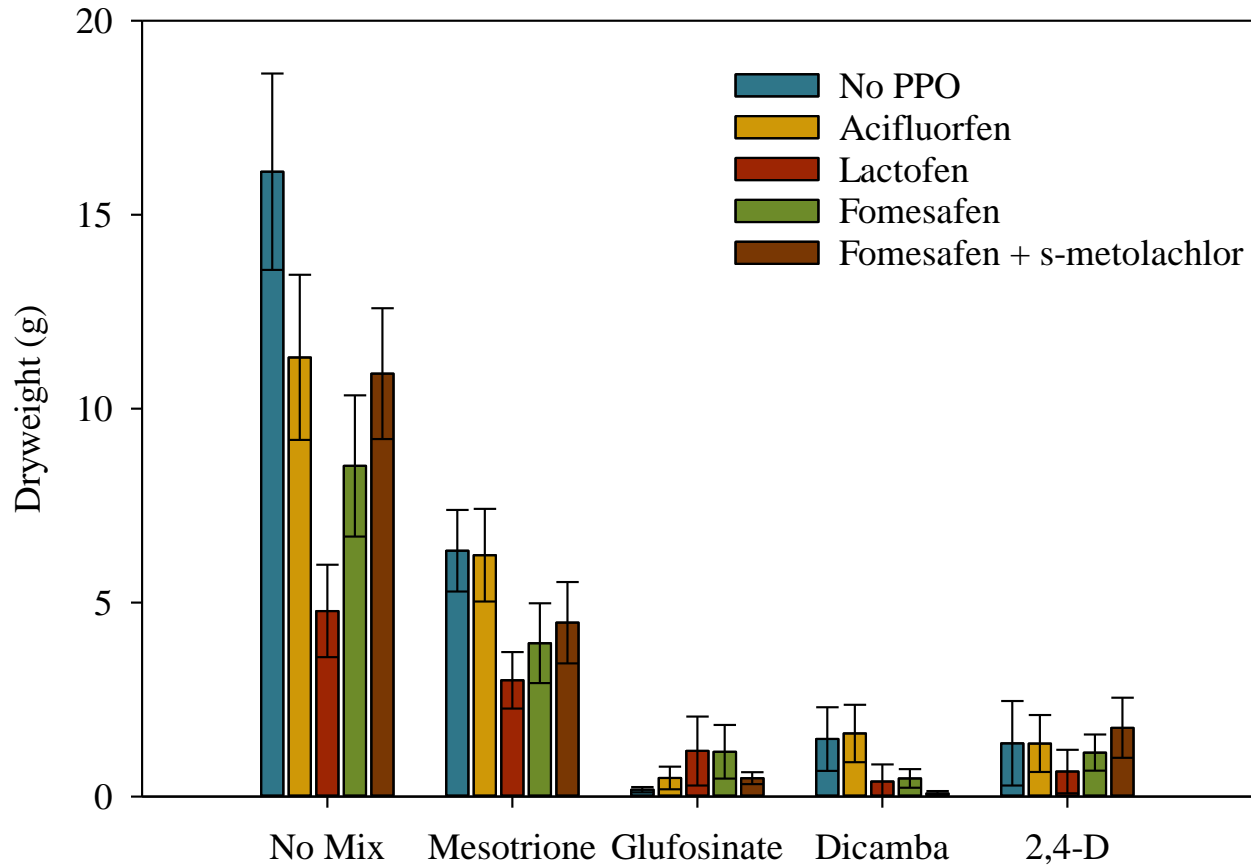
Carfentrazone
Carfentrazone

Flumiclorac
Flumiclorac

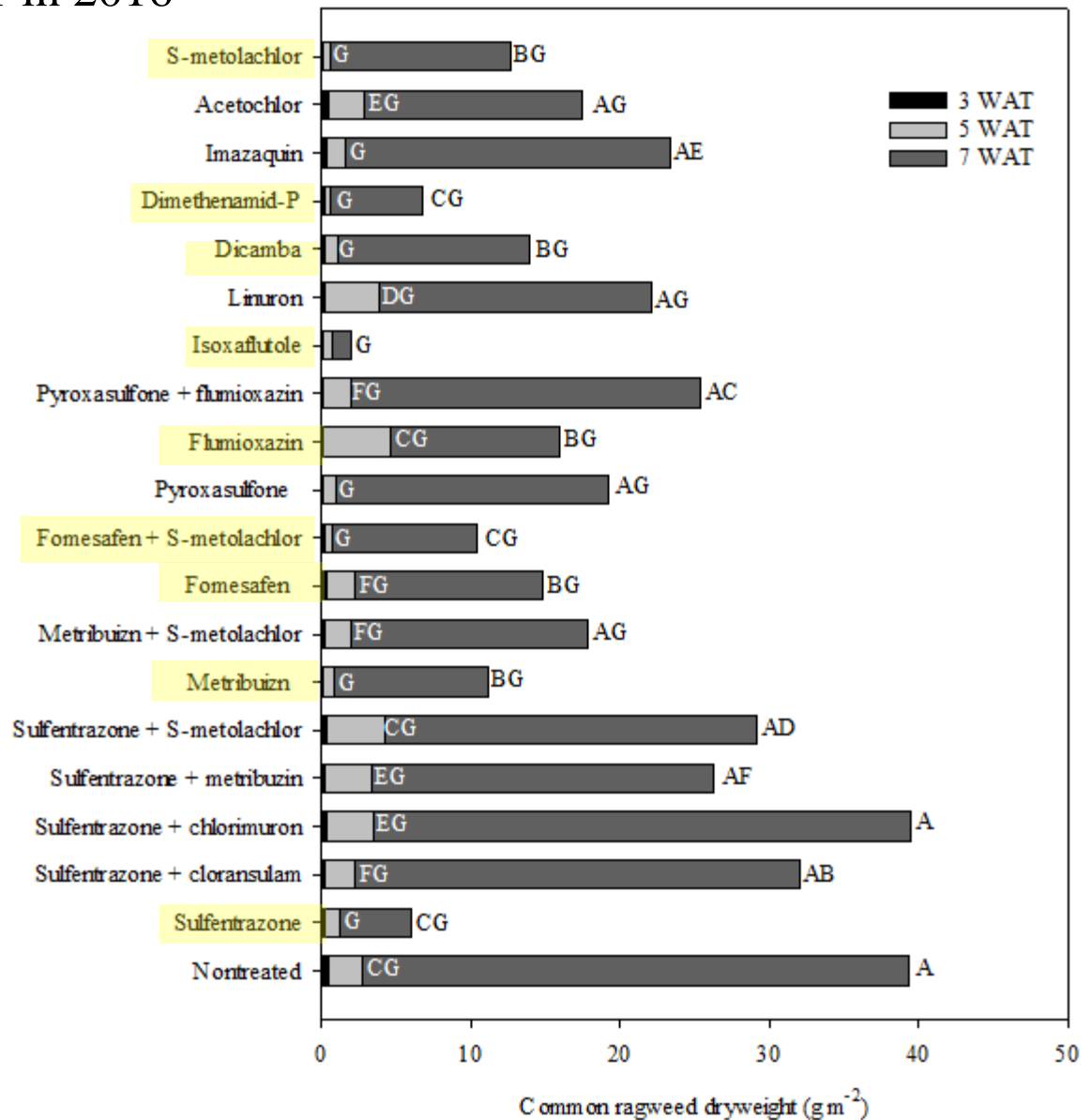
Cloransulam
Cloransulam

Chlorimuron
Chlorimuron

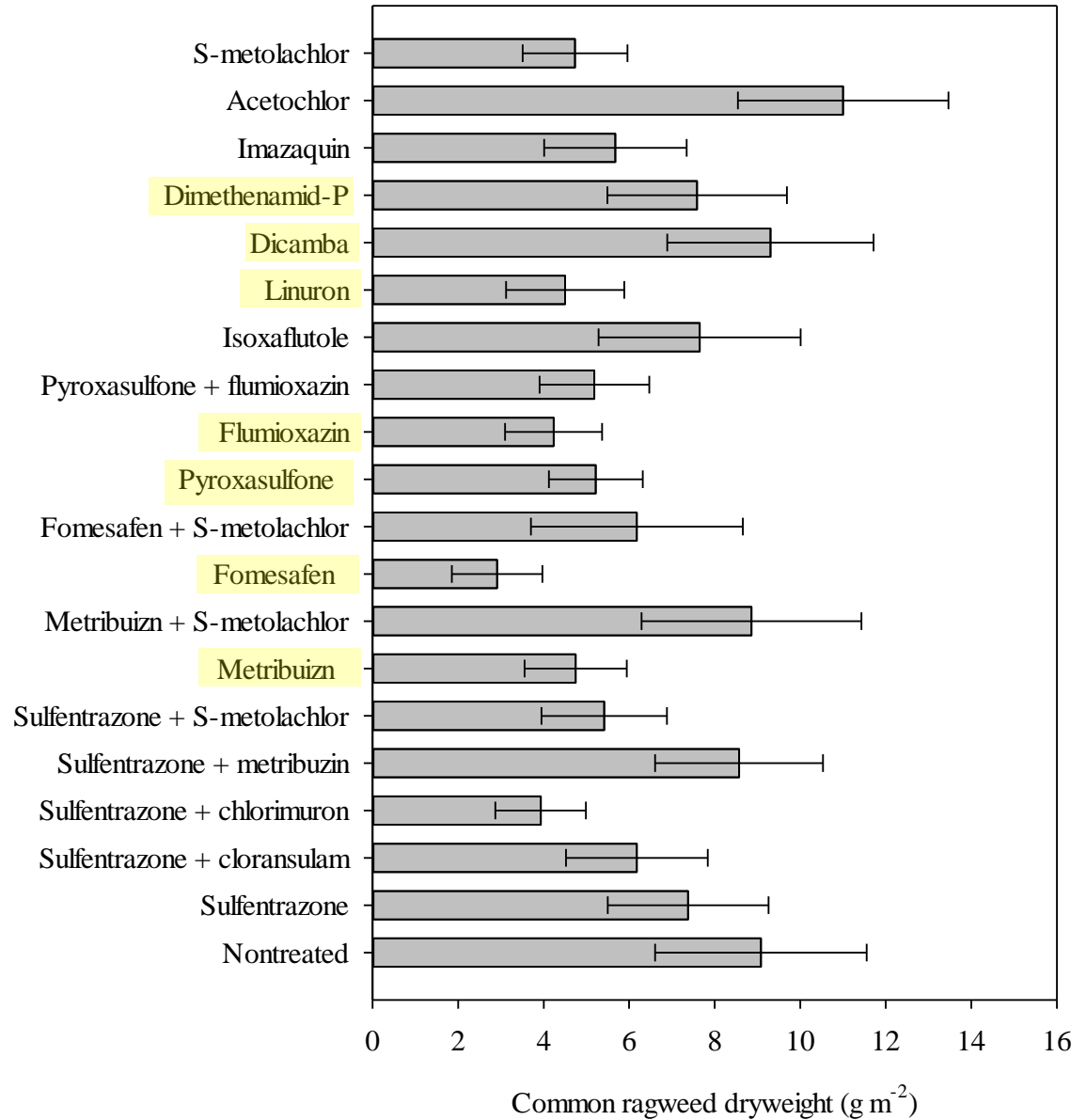
Influence of herbicide technology and PPO-inhibitor on common ragweed biomass



Common Ragweed Biomass Recorded 3,5 and 7WAT in 2016



Common Ragweed Biomass Recorded 7 WAT in 2017



7 WAP



Nontreated

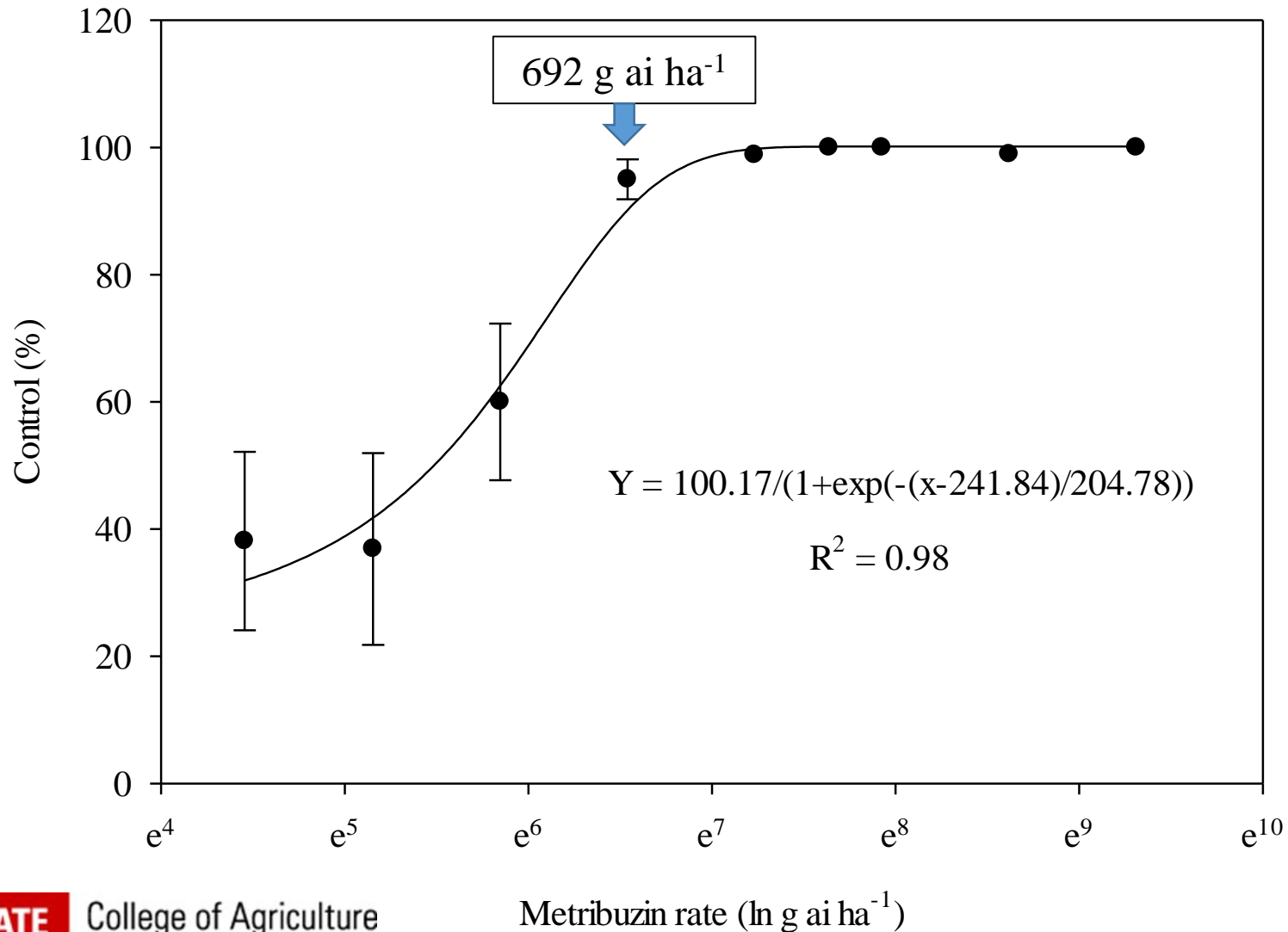


Sulfentrazone
+ metribuzin

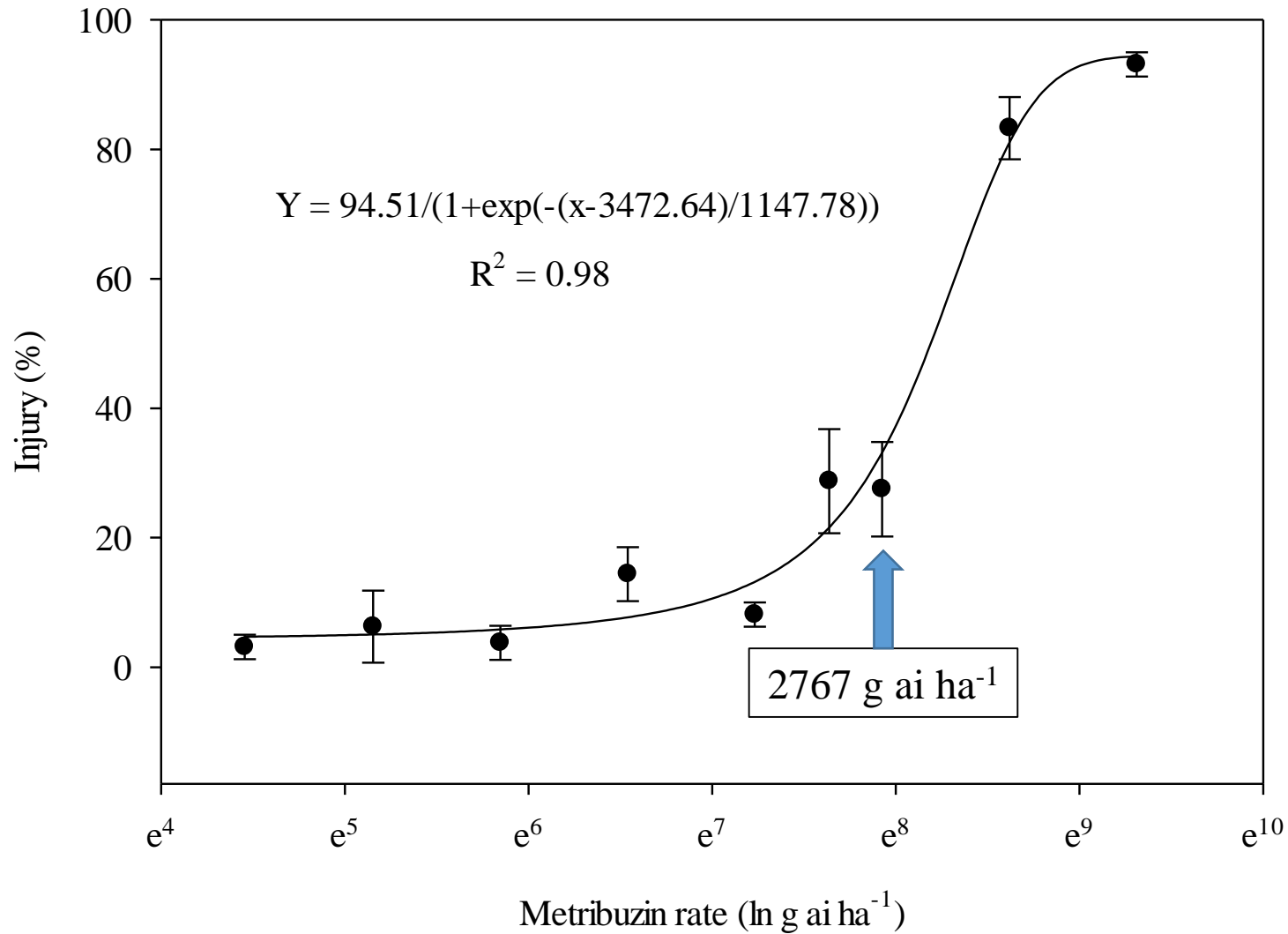


Metribuzin

Common Ragweed Control 4 WAT



Soybean injury 4 WAT



Auxin Update

- Registration for dicamba products registered for over-the-top use on GM cotton and soybeans extended until December 20, 2020, unless EPA acts to extend it.
 - Xtend, Engenia, and Fexapan
- 24C label will be utilized to require training conducted by Charlie Cahoon and Wesley Everman (maybe others).
 - Plan to add onto existing grain and cotton meetings
 - 45 minute presentation, 1 hour of credit

Auxin Update

- Only certified applicators may apply dicamba over the top (those working under the supervision of a certified applicator may no longer make applications)
- Prohibit over-the-top application of dicamba on soybeans 45 days after planting and cotton 60 days after planting
- For cotton, limit the number of over-the-top applications from 4 to 2 (soybeans remain at 2 OTT applications)
- Applications will be allowed only from 1 hour after sunrise to 2 hours before sunset

Auxin Update

- In counties where endangered species may exist, the downwind buffer will remain at 110 feet and there will be a new 57-foot buffer around the other sides of the field (the 110-foot downwind buffer applies to all applications, not just in counties where endangered species may exist)
- Clarify training period for 2019 and beyond, ensuring consistency across all three products
- Enhanced tank clean-out instructions for the entire system

Auxin Update

- Enhanced label to improve applicator awareness on the impact of low pH's on the potential volatility of dicamba
- Label clean up and consistency to improve compliance and enforceability

Questions?



WeedFreeNC
PULL TOGETHER